USING SVG TO PROVIDE CUSTOMIZED HOUSING SOLUTIONS FOR LOW-INCOME POPULATION

Grupo GIV

Departamento de Arquitectura

Grupo COMIT

Departamento de Ingeniería de Sistemas y Computación

Universidad de Los Andes – Bogotá, Colombia

Equipo de trabajo

Catarsis 1 - CVP

Comit
- Germán Bravo
- Claudia Jiménez
- Rafael García
- Sergio Moreno

GIV
Rodrigo Rubio
Rafael Villazón
Juan Camilo Olano
Juan Pablo Cuervo
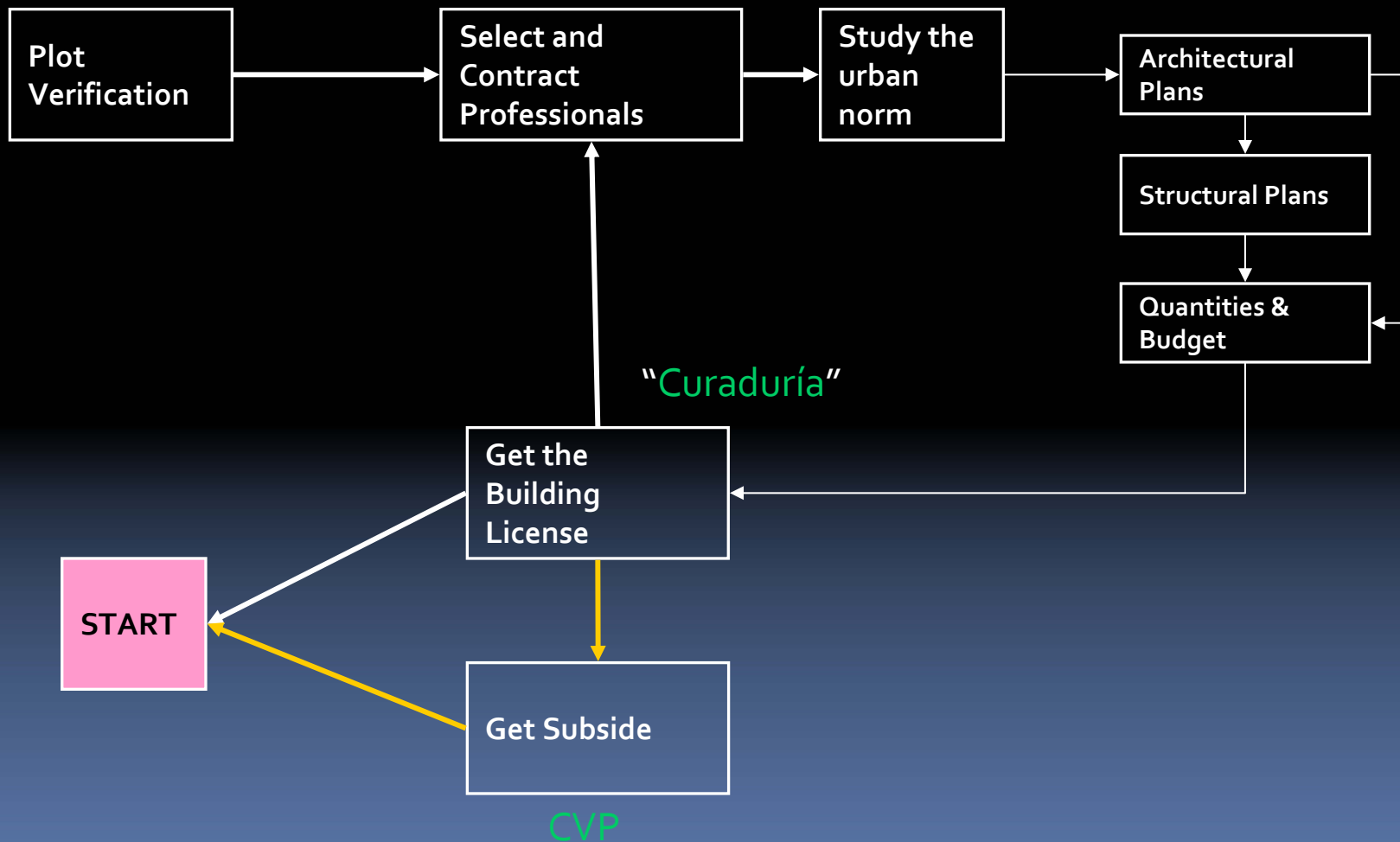Javier Silva
Clemencia Escallón

Catarsis 2 - MAVDT

Comit
- Germán Bravo
- Claudia Jiménez
- Juan Carlos Borda

GIV
Stefano Anzellini
Sandra Triana
Clemencia Escallón
Juan Pablo Cuervo
Tomás Jaramillo
Juan Carlos Negret
Johanna Niño

Legal Construction Process

Plot Verification → **Select and Contract Professionals** → **Study the urban norm** → **Architectural Plans**

Architectural Plans → **Structural Plans** → **Quantities & Budget**

"Curaduría"

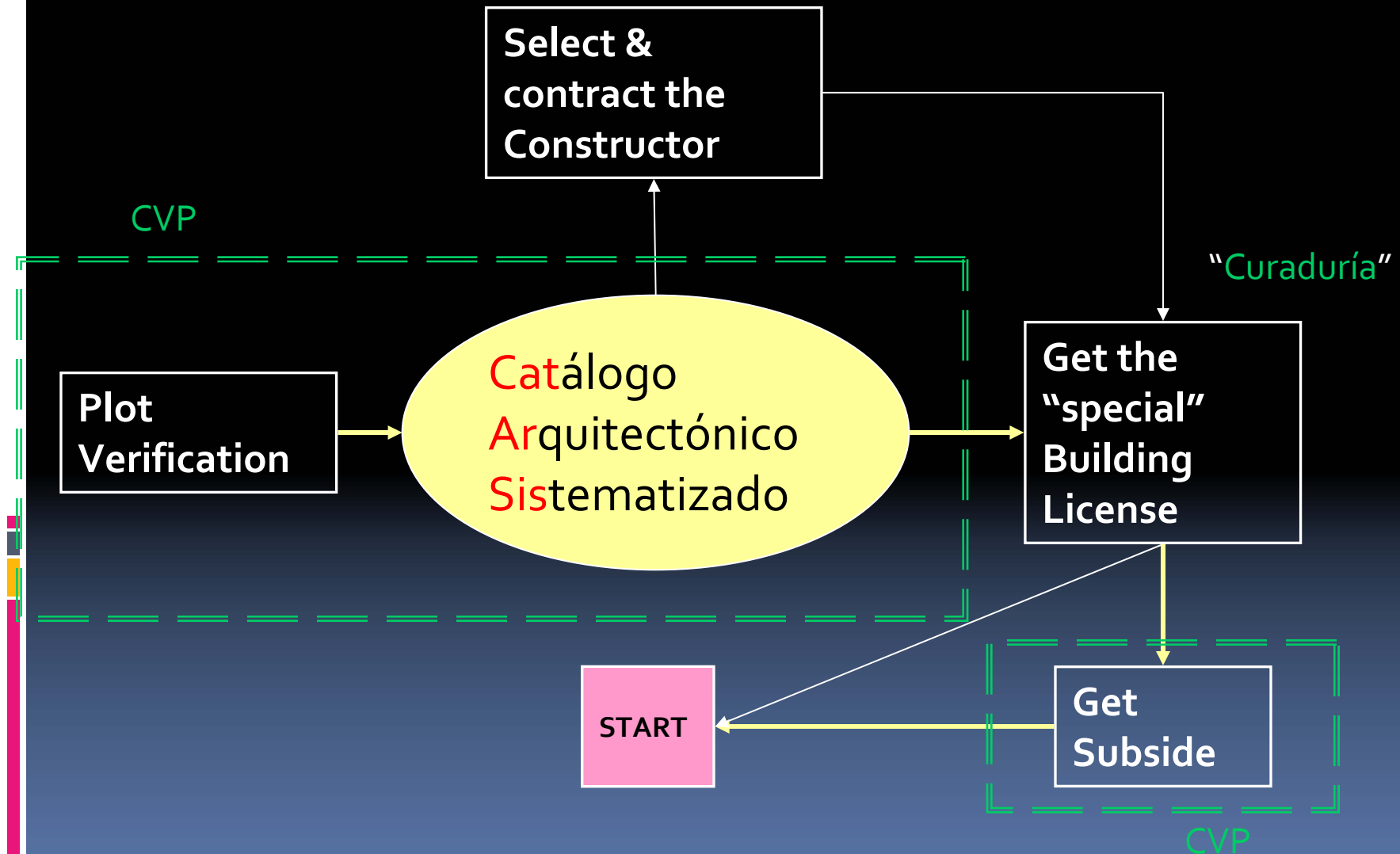**Get the Building License**

START

Get Subside

CVP

CatArSis' Objective

- Provide low cost professional services to low-income population

- Facilitate the getting of the building license and governmental subside to low-income population

- Help CVP/MAVDT to grant subsides

- Diminish the illegal construction development

The CatArSis' Strategy

- Generate generic architectural models
  - Appropriate to social context
  - Fulfill architectural & technical standards
  - Fully documented
  - Easily personalized
- Socialize these models
  - CVP / MAVDT
  - "Curadurías"
  - Low-income population
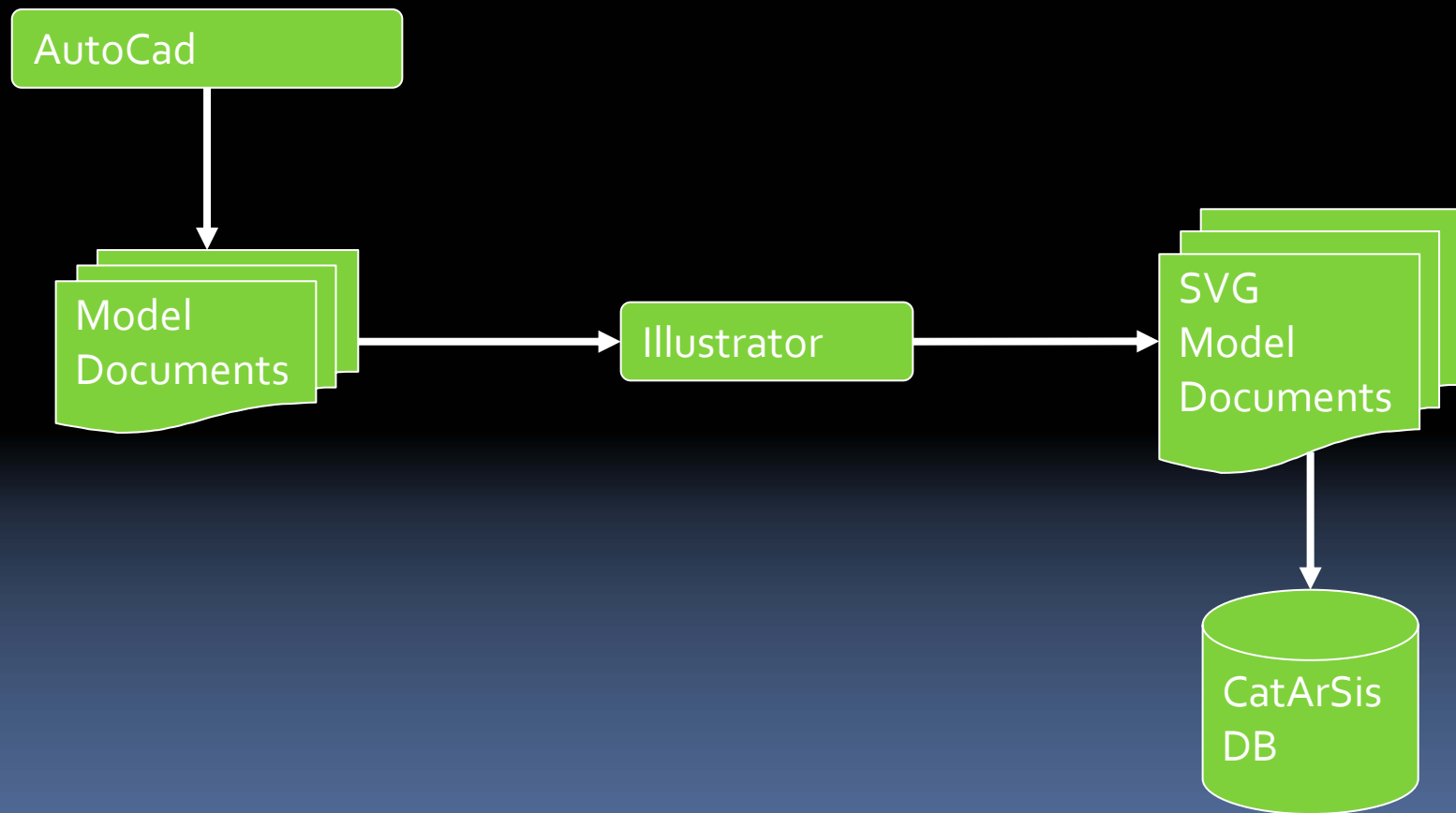 - Construction Companies

The CatArSis' Strategy

Select & contract the Constructor

CVP

"Curaduría"

Plot Verification

Catálogo **Ar**quitectónico **Sis**tematizado

Get the "special" Building License

START

Get Subside

CVP

Functional Requirements

- Store the architectural models
- Select the models fitting a plot
- Generate all the model documentation fully personalized
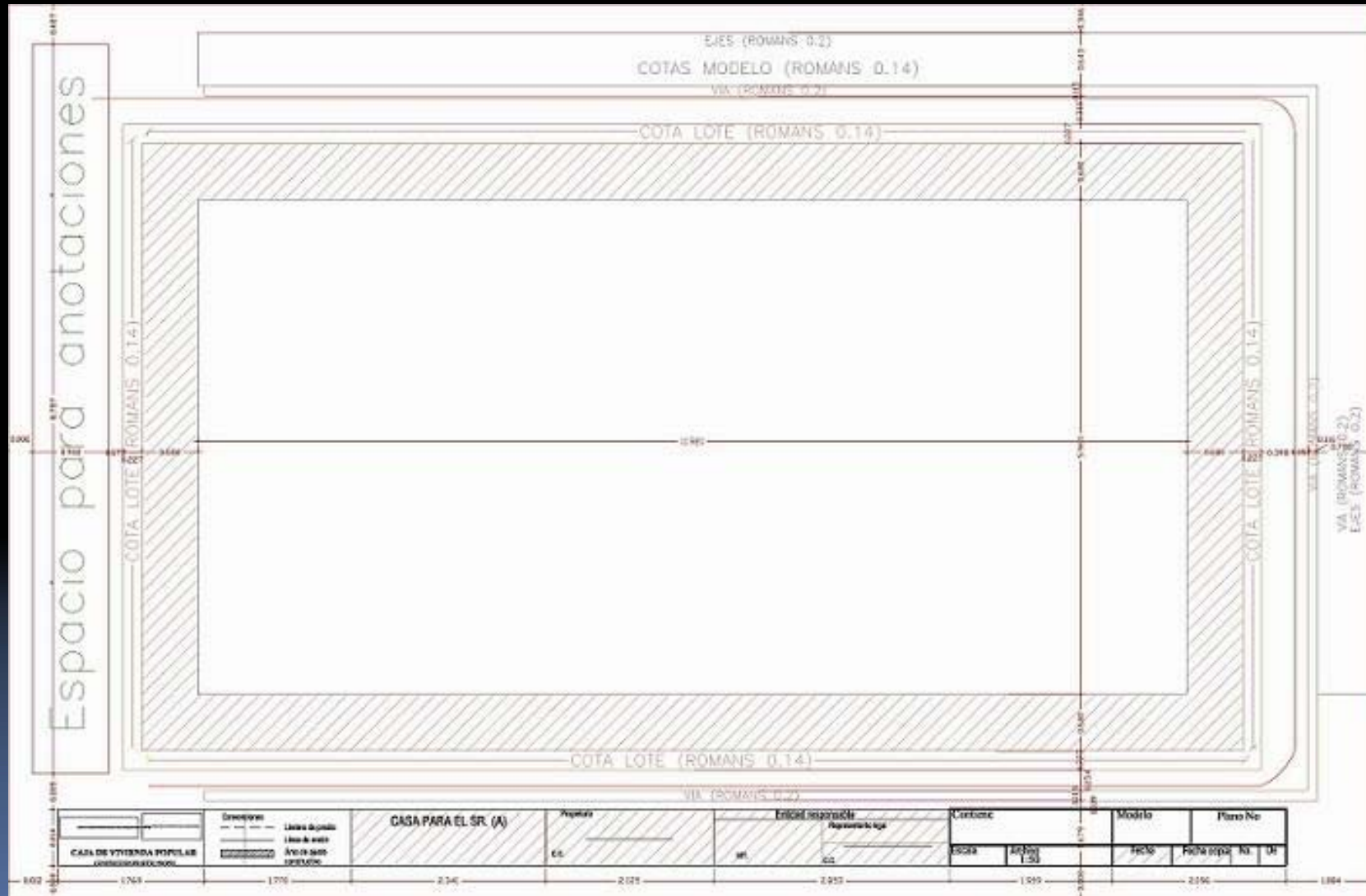 - Budget
  - Presentation letters

Non Functional Requirements

- Usability
  - Low learning curve
    - Easy to use application
- Low cost implementation
  - Open technologies
    - Java, SVG, postgres
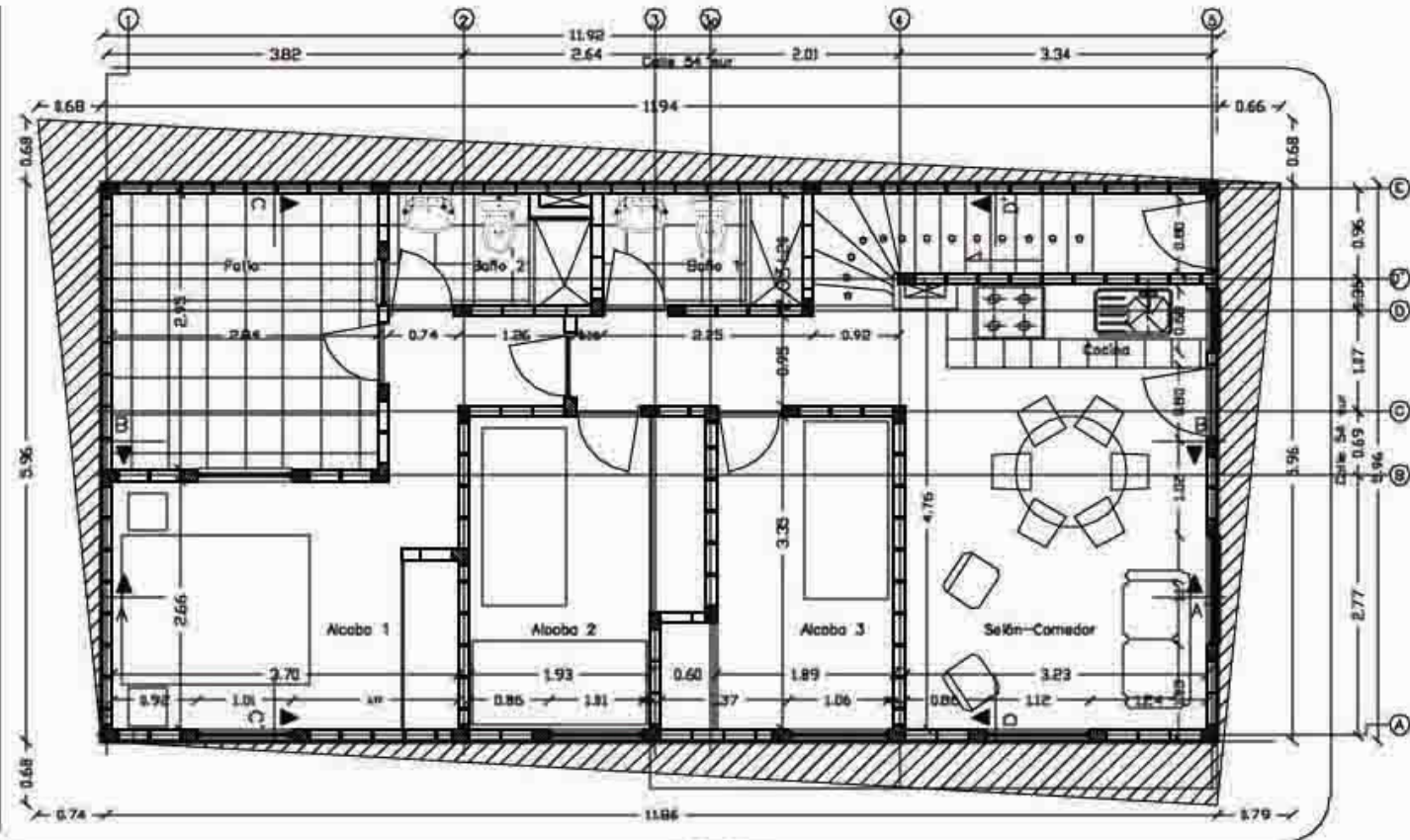   - Documentation output in legal size sheets of paper
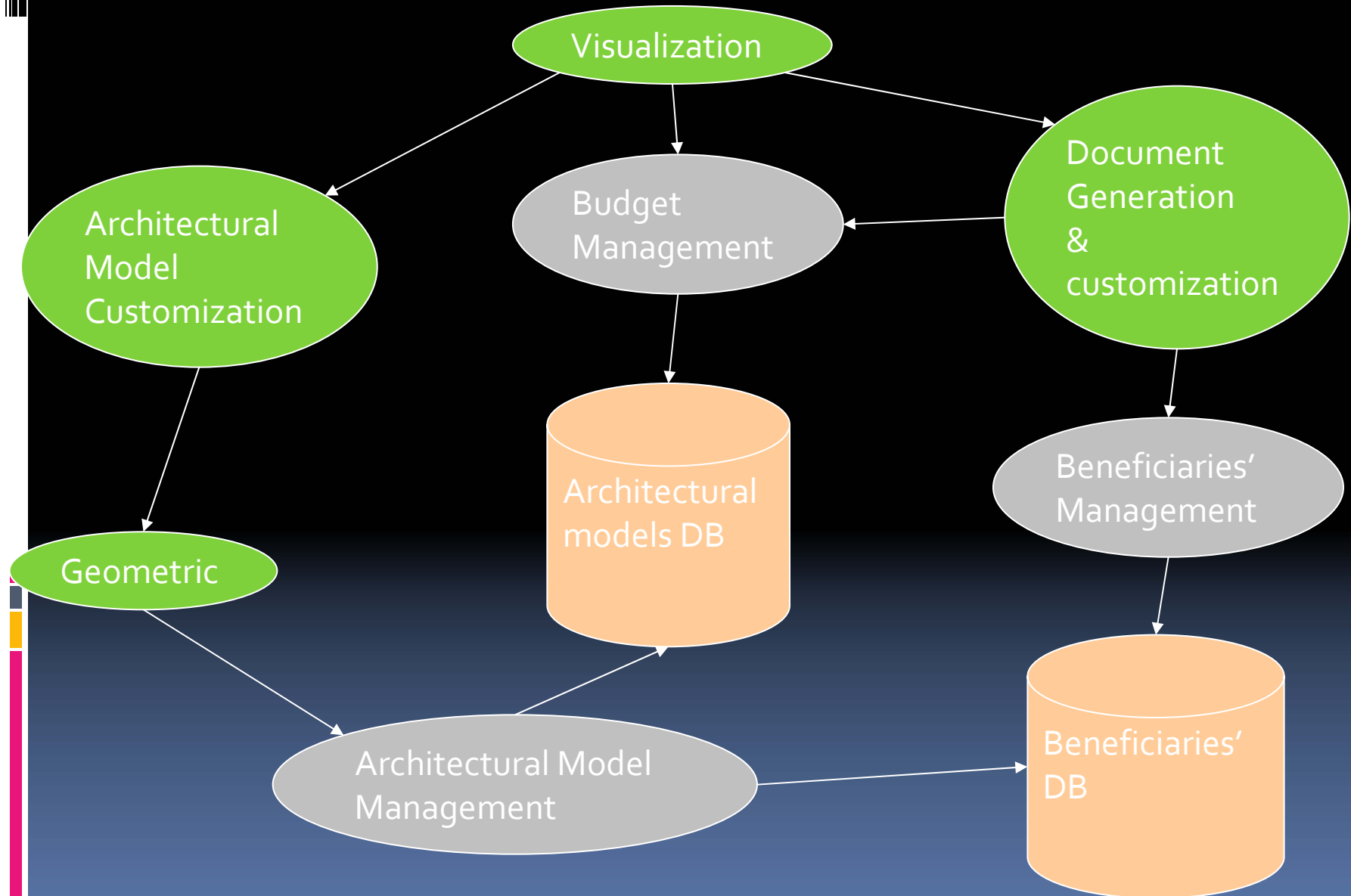
Model Processing

AutoCad

Model Documents

Illustrator

SVG Model Documents

CatArSis DB

CatArSis' Template

CatArSis' Template

Software Architecture

Outcomes

- Spread out CatArSis
- Generate more models
- Target other contexts – schools, …
- Morphing of models
- Integration with city applications

Thank you !